CLAIMS

What is claimed is:

1.   A method for video segment replacement, the method comprising:

receiving an input video signal;

receiving a trigger signal via a computer communications network identifying a segment in the input video signal; and

generating an output video signal comprising the input video signal with the segment replaced with a replacement portion.

2.   The method as recited in claim 1, wherein the output video signal has a time delay from the input video signal.

3.   The method as recited in claim 1, further comprising generating the input video signal intact in case of an operations problem.

4.   The method as recited in claim 1, wherein the segment identified by the trigger signal comprises an advertisement.

5.   The method as recited in claim 4, wherein the trigger signal comprises a respective trigger signal channel indications.

6. The method as recited in claim 5, wherein the trigger signal further comprises a time regarding when the advertisement begins or ends on the respective trigger signal channel.

7. The method as recited in claim 5, wherein the generating further comprises:

identifying a current channel of the input video signal; and

matching the current channel with the trigger signal channel, before using the trigger signal.

8. The method as recited in claim 7, wherein the identifying is performed using a channel signal from a tuner.

9. The method as recited in claim 7, wherein the identifying is performed by analyzing VBI data in the input video signal.

10. The method as recited in claim 9, wherein the analyzing VBI data compares VBI data in the input video signal and channel VBI data received via a computer communications network.

11. The method as recited in claim 1, wherein the switching signal is generated automatically.

12. The method in claim 11, wherein the switching signal is generated based on fingerprint data.

13. The method as recited in claim 1, wherein the switching signal is generated manually.

14. A method for video segment replacement, the method comprising:

receiving an input video signal;

receiving a switching signal identifying a segment in the input video signal; and

generating an output video signal comprising the input video signal with the segment replaced with a replacement portion selected by a local operator.

15. The method as recited in claim 14, wherein the replacement portion is an advertisement targeted to a particular assembled group.

16. The method as recited in claim 15, wherein the replacement portion is an advertisement for products available for in-person purchase by the group at time of output.

17. The method as recited in claim 15, wherein the replacement portion is an advertisement for services available for in-person purchase by the group at time of output.

18. The method as recited in claim 14, wherein the replacement portion is chosen and downloaded by the local operator over a computer communications network.

19. The method as recited in claim 14, wherein the replacement portion is supplied by the local operator on a computer readable storage medium.

20. A method for video segment replacement, the method comprising:

receiving an input video signal;

receiving a manually generated switching signal identifying a segment in the input video signal; and

generating an output video signal comprising the input video signal with the segment replaced with a replacement portion.

21.   The method as recited in claim 20, wherein the manually generated switching signal is generated remotely.

22.   The method as recited in claim 20, wherein the manually generated switching signal is generated locally.

23.   A method for video segment insertion, the apparatus comprising:

inputting an original video signal;

generating a plurality of video signals, each video signal comprising the original video signal with replacement portions substituted for detected segments in the original video signal, the replacement portions selected for particular patrons by using a viewer database; and

distributing each of the plurality video signals to their respective patrons via an associated output device.

24.   The method as recited in claim 23, wherein the detected segments are detected manually.

25.   The method as recited in claim 23, wherein the replacement portions are selected by a local operator.

26.   A method for operating a monitoring station, the method comprising:

        detecting a start of an advertisement on a plurality of channels; and

        transmitting a trigger signal based on the detecting to a plurality of local viewing stations via a computer communications network.

27.   The method as recited in claim 26, further comprising charging a fee to recipients of the transmitted trigger signal.

28.   The method as recited in claim 26, wherein the detecting is performed manually.

29.   The method as recited in claim 28, wherein after a manual detection, a detection signal is transmitted to a network monitoring station which performs the transmitting a trigger signal.

30.   The method as recited in claim 26, wherein the detecting is performed automatically using fingerprint data.

31.   The method as recited in claim 30, wherein after an automatic detection, a detection signal is transmitted to a network monitoring station which performs the transmitting a trigger signal.

32. The method as recited in claim 26, further comprising charging a fee to recipients of the transmitting.

33. The method as recited in claim 26, wherein the trigger signal comprises an indicator of a presence of an advertisement, a channel, and a time.

34. A method of detecting advertisements, the method comprising:

detecting an advertisement; and

predicting a length of the advertisement.

35. The method as recited in claim 34, wherein the predicting is determined using an average number of advertisements presenting during a relevant type of programming.

36. The method as recited in claim 34, wherein the predicting is determined using a time of day.

37. The method as recited in claim 34, wherein the predicting is determined using information regarding a current programming channel or network.

38. The method as recited in claim 34, further comprising using the length to determine a number of replacement segments to be substituted.

39. An apparatus for video segment replacement, the apparatus comprising:

an identifying unit identifying a segment in an input video signal;

a replacing unit replacing the segment in the input video signal with a replacement portion to generate an output video signal;

an output unit generating the output video signal; and

a bypass circuit bypassing the replacing unit and generating the input video signal on the output unit in case of an operations problem.

40.   The apparatus as recited in claim 39, wherein the bypass circuit further comprises:

a splitter splitting an original video signal into the input video signal and an identical duplicate input video signal;

a selector selecting either the output video signal or the duplicate video signal,

wherein the selector selects the output video signal unless the identifying unit or replacing unit or output unit is unavailable, thereupon selecting the duplicate video signal.

41.   An apparatus for video detection and replacement, the apparatus comprising:

an identifying unit receiving a trigger signal via a computer communications network identifying a segment in an input video signal;

a replacing unit replacing the segment in the input video signal with a replacement portion to generate an output video signal; and

an output unit generating the output video signal.

42.   An apparatus for video segment replacement, the apparatus comprising:

an identifying unit identifying a segment in an input video signal;

a replacing unit replacing the segment in the input video signal with a locally supplied replacement portion to generate an output video signal; and

an output unit generating the output video signal.

43.   The apparatus as recited in claim 42, further comprising a replacement portion storage unit.

44.   The apparatus as recited in claim 43, further comprising a local replacement portion interface allowing an operator to transfer a custom selected replacement portion into the replacement portion storage unit.

45.   The apparatus as recited in claim 44, wherein the custom selected replacement portion is selected and downloaded via a computer communications network into the replacement portion storage unit.

46.   The apparatus as recited in claim 44, wherein the custom selected replacement portion is copied from a recordable medium into the replacement portion storage unit.

47.   An apparatus for composite video segment insertion, the apparatus comprising:

a receiving unit receiving a composite video signal comprising a plurality of channels;

a detection and replacement device detecting segments on more than one channel in the composite video signal and replacing the detected segments with respective replacement portions; and

an output unit generating a composite video signal comprising the plurality of channels after the detecting and replacing.

48.   The apparatus as recited in claim 47, wherein the detecting is performed manually and remotely.

49.   The apparatus as recited in claim 47, wherein the detecting is performed using fingerprint data.

50.   An apparatus for video segment insertion, the apparatus comprising:

an input device inputting an original video signal;

a generating apparatus generating a plurality of video signals, each video signal comprising the original video signal with replacement portions substituted for detected segments in the original video signal, the replacement portions selected for particular patrons by using a viewer database; and

a distributing device distributing each of the plurality video signals to their respective patrons via an associated output device.

51.   The apparatus as recited in claim 50, wherein the detected segments are detected manually.

52.   The apparatus as recited in claim 50, wherein the replacement portions are selected by a local operator.